## Amendments to the Specification:

**[0001]** This is a continuation in part of application Ser. No. 09/928,294 filed August 10, 2001, which is a continuation in part of application Ser. No. 09/853,487 filed May 10, 2001 now US patent 6,966,837, the entire contents of which are incorporated by reference herein.

**[0017]** Fig. 7 is a touch-sensitive LCD screen with cartesian coordinates superimposed to illustrate selection and movement of simulated objects displayed on the LCD touchscreen. ~~perspective view of a portable game system that generates 3D pictures from texture rendered polygons for display on an LCD.~~

**[0026]** Portable game system 47 contains miniature analog joysticks 20 and 21 for manually controlling fine 3D movements of player characters and virtual cameras in the simulated 3D game worlds. Touch-sensitive panels 23 (Fig. 4) on LCD displays 22 and 33 and touchpads 24 (Fig. 8) may substitute for joysticks 20 and 21. External memory 16 may contain semiconductor memory or an optically coded disk. Sound is provided by speaker 27.

**[0044]** Portable game system 47 comprises CPU processor 50, RAM 53 for storing game programs and data, boot ROM 76 for power up and reset, direction switch 15 (only one of the 4 switches is shown), button switches 14 (not shown), and analog joystick 20. Touch-sensitive pad 24 ~~(Fig. 8)~~ or touch-sensitive screen 23 may substitute for joystick 20 or supplement joystick 20 for use by a player who is manually controlling player characters and other 3D objects. Such 3D objects in the simulated game world are generated by processor 50 and associated graphics co-processor (not shown) for display on LCD 22. Peripheral interface chip 88 (not shown) such as a UART is included for sending (153) and receiving (154) digital data to and from portable game system 44.

**[0050]** Execution of game programs in processor 50 is controlled by manually entered input signals from direction-switch 15, analog joysticks 20 and 21 (Fig. 1), ~~(Fig. 7),~~ touch-sensitive pad 24, touchscreen 23, button switches 14 and 57 (which may also be touch-sensitive sensors), motion sensors, and/or other manual controls in portable game system 47.

The following paragraph 0051.2 was copied from part of paragraph 0086 in parent application 09/928,294.

**[0051.2]** Touchscreen 23, touchpad 24, and controller processor 51 determine which ~~for determining finger~~ locations on touchscreen 23 and touchpad 24 have been touched. Processor 51 outputs X and Y coordinates of the touched locations to processor 50. Use of touchscreen 23 is described below with reference to Fig. 7.

The following paragraphs 0065 and 0065.1 are copied from paragraphs 0096 and 0097 in parent application 09/928,294.

**[0065]** Fig. 7 ~~11~~ illustrates manual use of touchscreen 23 with X,Y coordinates for indicating a two-dimensional location on the underlying LCD screen 22 (Fig. 4). Fig. 7 ~~11~~ shows hand 37 shaped as a fist and located at coordinates ($X_1$ $Y_1$). When human player 12 places her finger over the image of hand 37 on touchscreen 23 and moves her finger on touchscreen 23 in the direction of the arrow to location ($X_2$ $Y_2$) - the hand image on LCD 22 follows her finger. ~~as described above with reference to Fig. 7.~~ Pipe 35 intersects coordinates ($X_2$ $Y_2$) and hence when hand 37 intersects pipe 35 at coordinates ($X_2$ $Y_2$) the program being executed in microprocessor 50 in handheld game system 47 interprets this collision as a command to show hand 37 grasping whatever object is at coordinates ($X_2$ $Y_2$) - in this example pipe 35.

**[0065.1]** The polygons which form the shape of hand 37 in the generated images displayed on LCD 22 are then modified by microprocessor 50 (Fig. 4) to show hand 37 grasping pipe 35 on LCD 22. ~~If player 12 implements this action, microprocessor 50 sends data to console 42 where microprocessor 86 (Fig. 24) modifies corresponding polygons which form the shape of hand 37 in the generated video images displayed on TV 11 (Fig. 2). Hence, when touchscreen 23 is used to move an object in the picture on LCD 22 from one LCD location to another location, the resulting action may appear on both the LCD 22 and TV screen 56.~~

The following paragraph 0065.2 finds support in Fig. 11 in parent application 09/928,294 and in paragraphs 0096 and 0125 (second sentence) in parent application 09/928,294.

**[0065.2]** A set of physical X, Y coordinates for each touched location on touchscreen 23 may be converted by processor 50 (Fig. 4) to simulated spatial coordinates X,Y,Z in the simulated 3-dimensional game world for polygon processing of hand 37 and pipe 35 in 3-dimensions by processor 50.

The following paragraph 0066.2 is copied from paragraph 0085 in parent application 09/928,294.

**[0066.2]** Touchpad 24 and touchscreen 23 on LCD 22 are sensitive to finger touching and can measure the approximate location of a finger on X-Y coordinates as described above ~~below~~ with reference to Fig. 7. ~~11. Transparent touchscreen technology is described in US patent 6,163,313.~~ In Fig. 8 ~~3 herein,~~ both touchpad 24 and touchscreen 23 on LCD 22 are specified for portable game systems 44 and 47 ~~control unit 28~~ so that a player can use fingers of both hands to maneuver virtual objects in 3-dimensional space on LCD screen 22. A player can select an object on touchscreen 23 with one finger, and while holding the finger steadily on the object, use another finger on touchpad 24 to rotate the object into the desired position. Touchpad 24 and touchscreen 23 can also act as push-buttons by accepting a finger tap, for example, of a few hundred milliseconds as a selection indicator.